

Title (en)
MAGNETIC STRAIN WAVE GEAR DEVICE

Title (de)
MAGNETISCHE SPANNUNGSWELLENGETRIEBEVORRICHTUNG

Title (fr)
DISPOSITIF D'ENGRENAGE À ONDE DE CONTRAINTE MAGNÉTIQUE

Publication
EP 4383532 A1 20240612 (EN)

Application
EP 21952686 A 20210802

Priority
JP 2021028562 W 20210802

Abstract (en)
Provided is a magnetic strain wave gear device that makes it possible to achieve both improvement of the efficiency of assembly work and suppression of decrease in energy conversion efficiency. A magnetic strain wave gear device (1) includes: a stator (3) having a stator core (31), a stator winding (32), and a stator magnet (33); a first rotor (4); and a second rotor (5). The second rotor includes a second rotor core (51) provided with a plurality of rotor magnet insertion holes and a plurality of rotor magnets (52) inserted into the plurality of respective rotor magnet insertion holes. The first rotor includes a cylindrical first rotor core and a first rotor end plate (42). The first rotor end plate has a rotor magnet passage hole (42b) through which the rotor magnets can be inserted into the rotor insertion holes from outside in a direction of a rotation shaft.

IPC 8 full level
H02K 16/02 (2006.01)

CPC (source: EP US)
H02K 1/17 (2013.01 - EP); **H02K 1/223** (2013.01 - EP); **H02K 1/276** (2013.01 - EP); **H02K 1/278** (2013.01 - EP); **H02K 1/30** (2013.01 - EP); **H02K 21/16** (2013.01 - EP); **H02K 49/102** (2013.01 - EP US); **H02K 2213/12** (2013.01 - EP); **Y02E 10/72** (2013.01 - EP); **Y02T 10/64** (2013.01 - EP)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
US 2024097547 A1 20240321; CN 117652081 A 20240305; EP 4383532 A1 20240612; EP 4383532 A4 20241023; JP 7527493 B2 20240802; JP WO2023012855 A1 20230209; WO 2023012855 A1 20230209

DOCDB simple family (application)
US 202118551711 A 20210802; CN 202180100810 A 20210802; EP 21952686 A 20210802; JP 2021028562 W 20210802; JP 2023539228 A 20210802